

TI-36196: Improving NiSi Metal Gate Stacks Using a Sacrificial Cap

Thermal Stability
(B-Doped Poly)

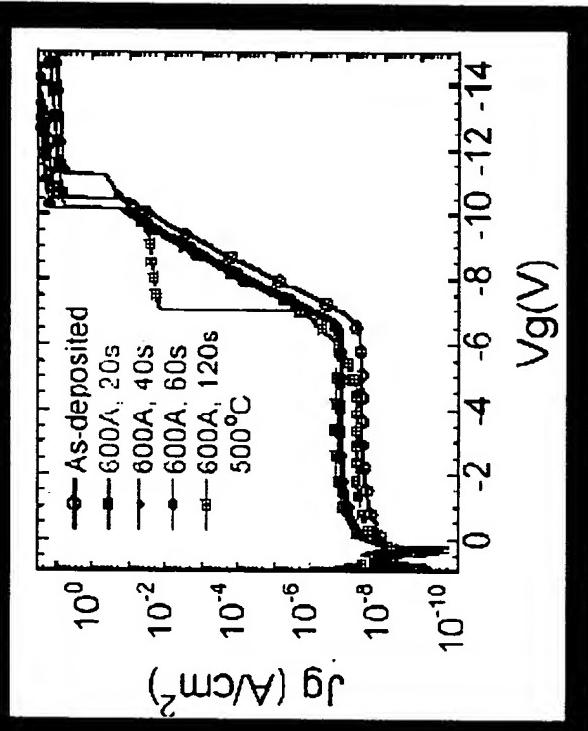


Fig. 1

TI-36196: Improving NiSi Metal Gate Stacks Using a Sacrificial Cap

Impact of TiN cap on B-doped NiSi gate

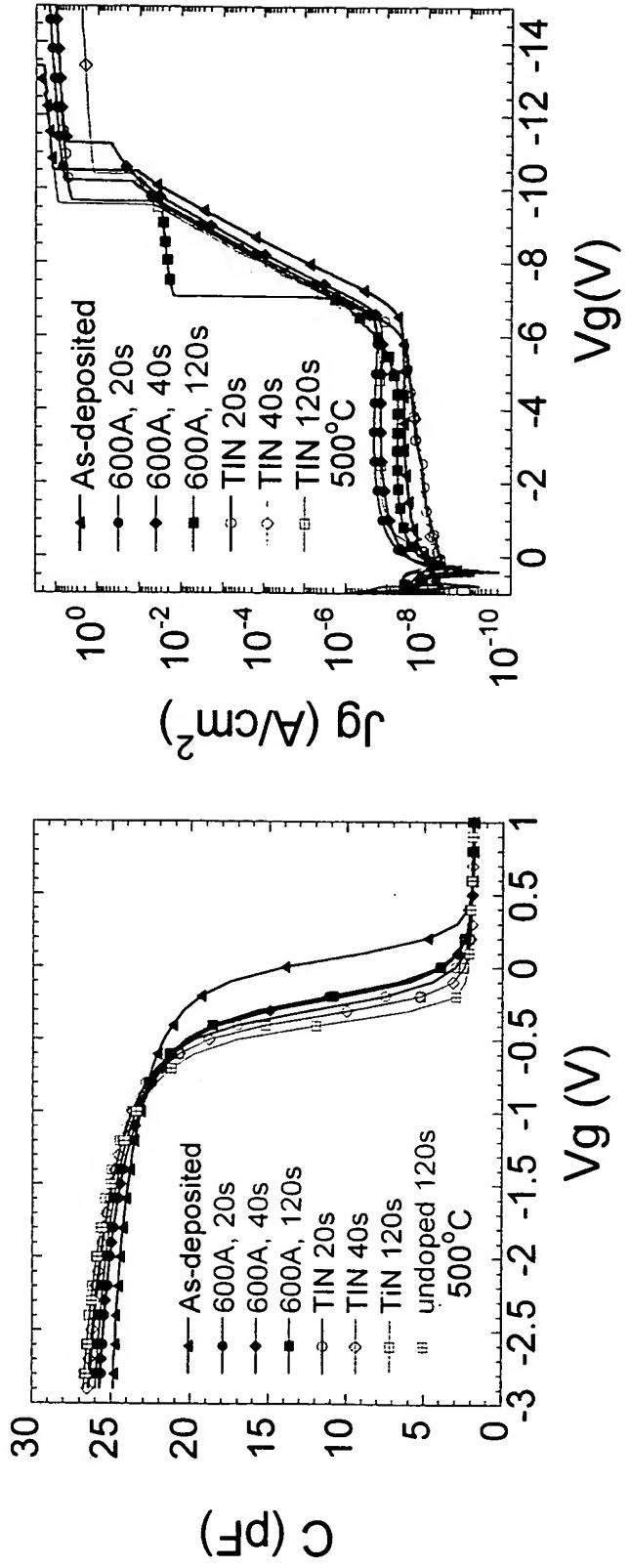


Fig. 2A

Fig. 2B

TI-36196
2 of 7

TI-36196: Improving NiSi Metal Gate Stacks Using a Sacrificial Cap

Impact of TiN cap on As-doped NiSi gate

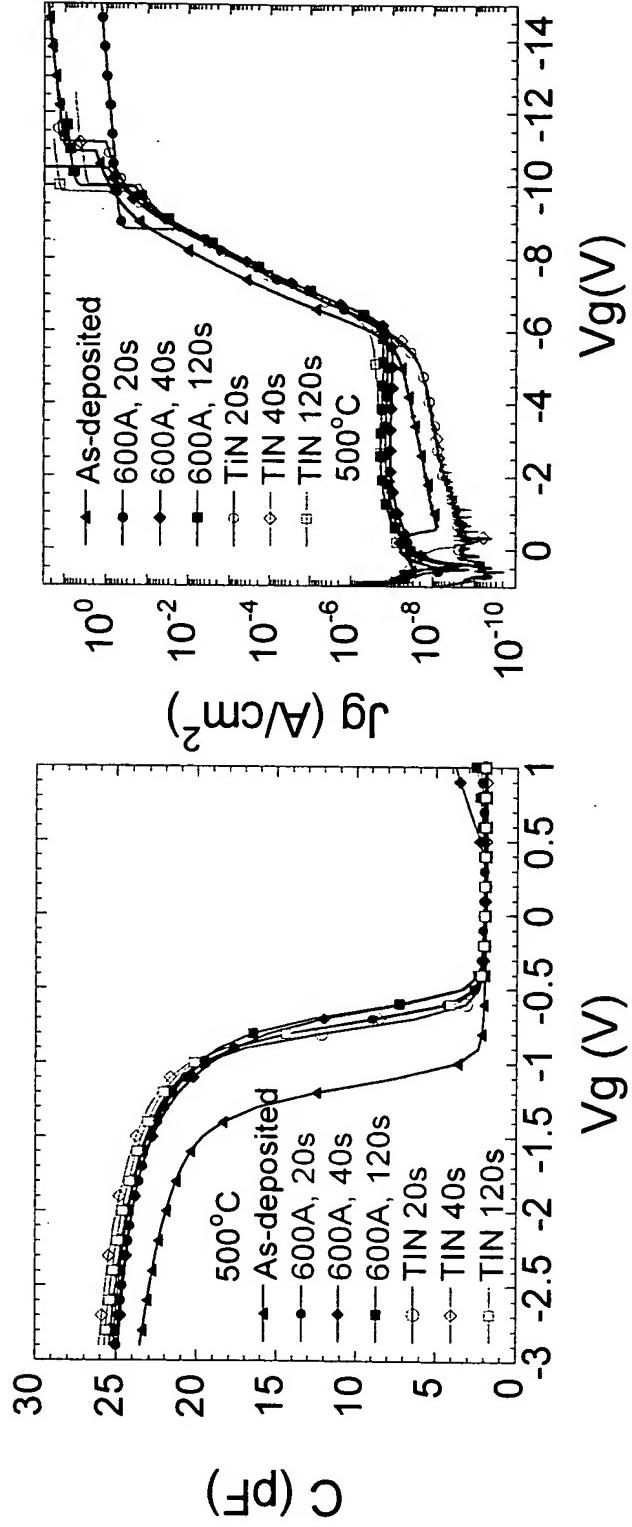


FIG. 3A

FIG. 3B

TI-36196
3 of 7

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TI-36196
4 of 7
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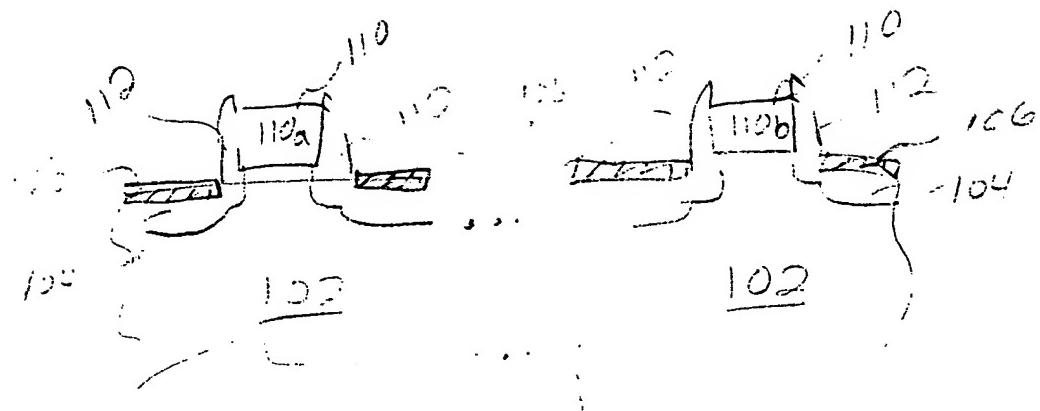


FIG. 4A

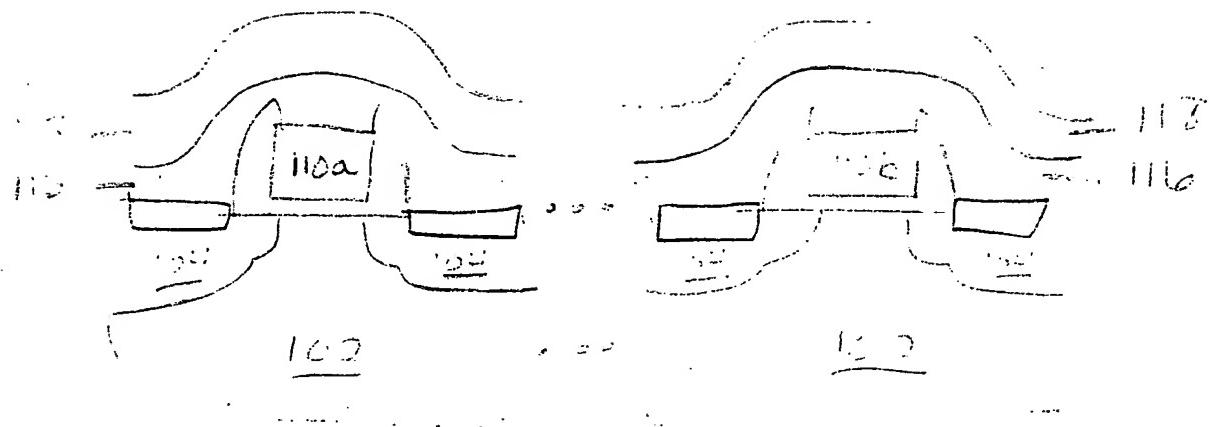


FIG. 4B

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TI-36196
5 of 7

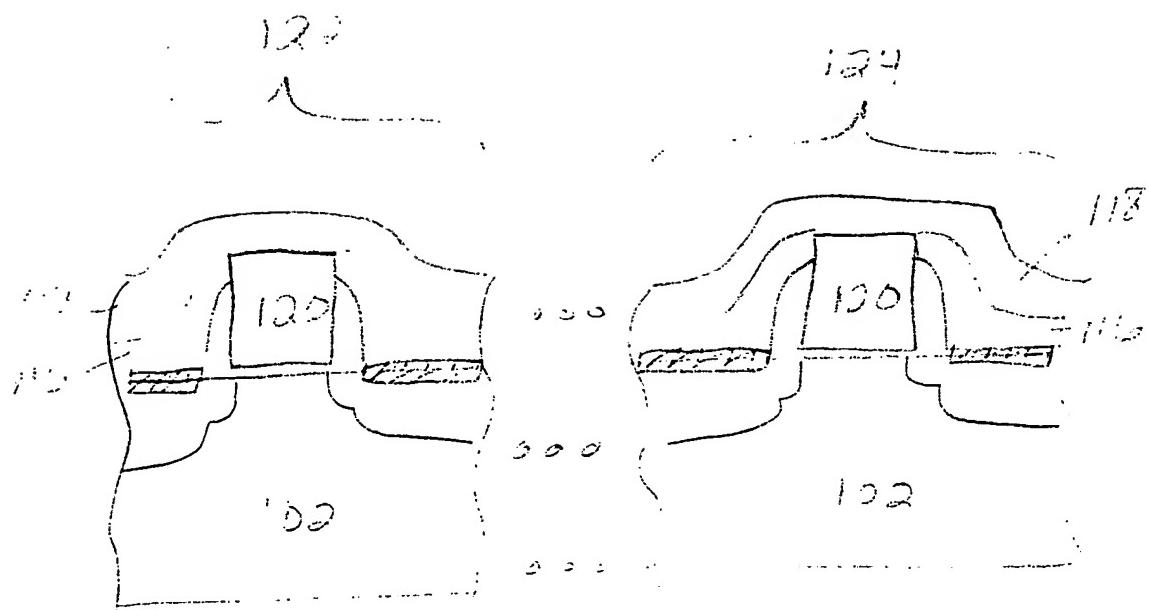


FIG. 4C

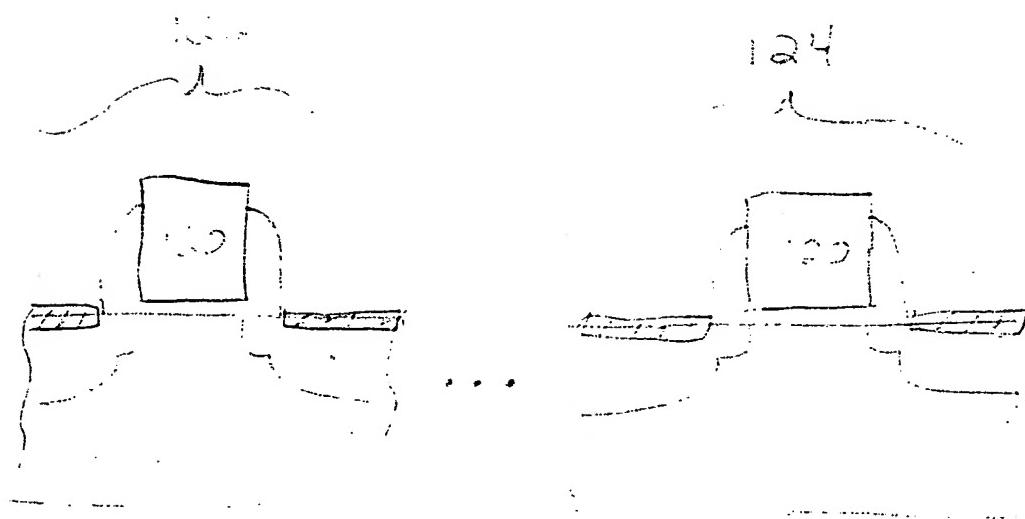


FIG. 4D

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TI-36196: Improving NiSi Metal Gate Stacks Using a Sacrificial Cap

Impact of TiN cap on B distribution

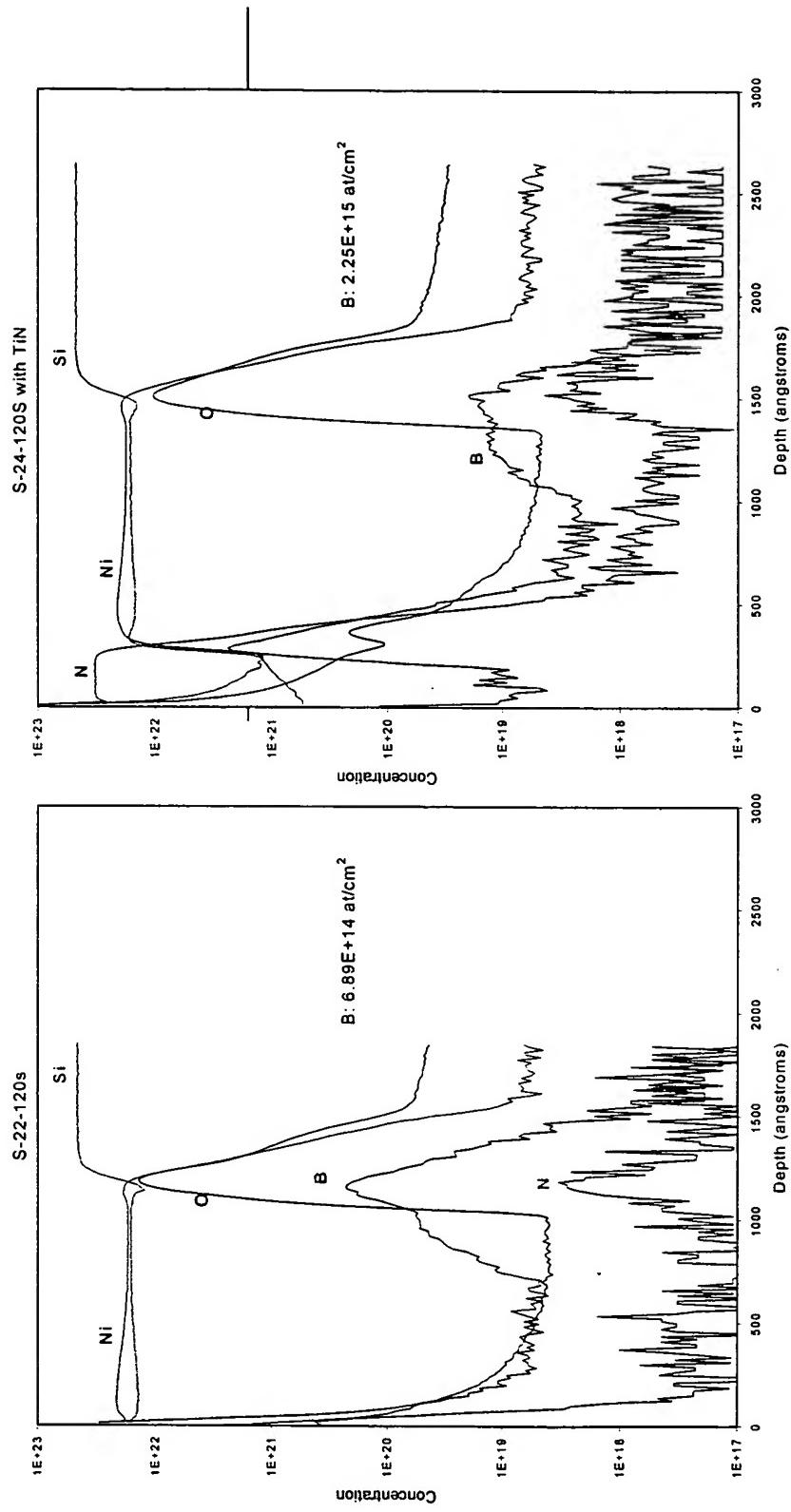


FIG 5A - No TiN cap

FIG 5B With TiN cap

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71-36196
6 of 7

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Impact of TiN cap on As distribution

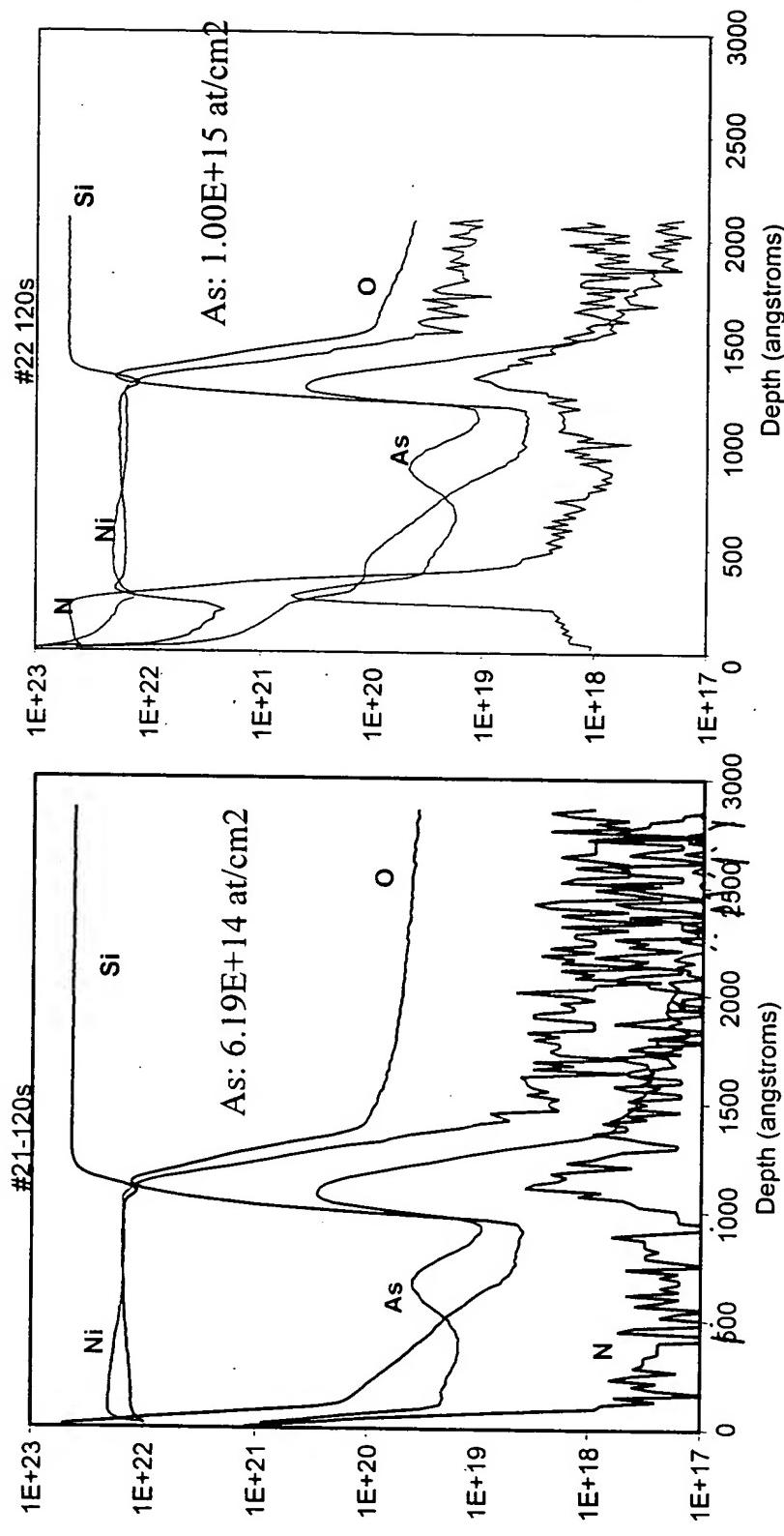


FIG. 6A No TiN cap

FIG. 6B With TiN cap

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11-36196
7 of 7